

Abstract of the Disclosure

This invention is used in communications, for example, in expanded signal spectrum broadband communication systems. The technical effect of this invention consists in an enhanced
5 narrow-band interference suppression factor and almost complete elimination of the effect displayed by a powerful narrow-band interference or a group of narrow-band interferences in a limited frequency band. A noise signal formed in the frequency band (F_0, F_1) in the transmission channel of a broadband communication
10 system is power-modulated by a given modulation technique at a modulation frequency $F_{\text{mod}} \ll (F_1 - F_0)$ and passed through a propagation medium, in which a narrow-band interference is superimposed thereon; received in the receiver; filtered in the frequency band (F_0, F_1) ; amplified, and divided into two signals.
15 One of the signals is obtained by amplifying the filtered signal and limiting the amplitude thereof, and the other signal is the filtered signal or a signal linearly amplified without altering the shape thereof. The two signals obtained are then multiplied; the resultant signal is filtered in the frequency band $[\Delta F_{\text{nar}}, (F_1 - F_0)]$; and the envelope of the signal obtained by filtration
20 in the frequency band $[\Delta F_{\text{nar}}, (F_1 - F_0)]$ is separated in order to be subsequently demodulated and to give an information signal. 6 illustrations.